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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
	10/558,270	TAKEMOTO ET AL.
Office Action Summary	Examiner	Art Unit
	PHI HOANG	2628
The MAILING DATE of this communication ap Period for Reply	ppears on the cover sheet with the	correspondence address
A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING ID. - Extensions of time may be available under the provisions of 37 CFR 1 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period. - Failure to reply within the set or extended period for reply will, by statu Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNICATIO .136(a). In no event, however, may a reply be tid d will apply and will expire SIX (6) MONTHS from te, cause the application to become ABANDONI	N. mely filed n the mailing date of this communication. ED (35 U.S.C. § 133).
Status		
1) Responsive to communication(s) filed on 28 i	is action is non-final. ance except for formal matters, pr	
Disposition of Claims		
4) ☐ Claim(s) <u>1-45</u> is/are pending in the application 4a) Of the above claim(s) is/are withdra 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) <u>1-6,9-14,17-20 and 25-28</u> is/are rejet 7) ☐ Claim(s) <u>7,8,15,16,21-24 and 29-32</u> is/are ob 8) ☐ Claim(s) are subject to restriction and/	awn from consideration. ected. jected to.	
9) The specification is objected to by the Examin 10) The drawing(s) filed on 28 November 2005 is/ Applicant may not request that any objection to the Replacement drawing sheet(s) including the corre- 11) The oath or declaration is objected to by the E	are: a)⊠ accepted or b)⊡ object e drawing(s) be held in abeyance. Se ction is required if the drawing(s) is ol	ee 37 CFR 1.85(a). Dijected to. See 37 CFR 1.121(d).
Priority under 35 U.S.C. § 119		
12) Acknowledgment is made of a claim for foreig a) All b) Some * c) None of: 1. Certified copies of the priority documer 2. Certified copies of the priority documer 3. Copies of the certified copies of the priority documer application from the International Burea * See the attached detailed Office action for a list	nts have been received. nts have been received in Applica ority documents have been receiv au (PCT Rule 17.2(a)).	tion No red in this National Stage
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 28 November 2005 and 04 December 2	4) Interview Summar Paper No(s)/Mail D 5) Notice of Informal 2006. 6) Other:	Date



Application No.

Art Unit: 2628

DETAILED ACTION

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 9-14, 25-28, and 39-44 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claims fail to fall within a statutory category of invention. It is directed to the program itself, not a process occurring as a result of executing the program, a machine programmed to operate in accordance with the program nor a manufacture structurally and functionally interconnected with the program in a manner which enables the program to act as a computer component and realize its functionality. It's also clearly not directed to a composition of matter. Therefore, it is non-statutory under 35 U.S.C. 101.

Claim Objections

3. Claims 8, 16, 21-24, and 29-32 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend from any other multiple dependent claim. See MPEP § 608.01(n). Accordingly, the claims have not been further treated on the merits.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Application/Control Number: 10/558,270

Art Unit: 2628

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Page 3

- 5. Claim 1-6 and 9-14 are rejected under 35 U.S.C. 102(e) as being anticipated by Harman (US 2002/0118275 A1).
- 6. Regarding claim 1, Harman discloses a stereoscopic image display apparatus for generating a stereoscopic image based on a file, comprising: a means for determining a description indicating a stereoscopic viewing-use process out of descriptions in a file (Page 5, paragraph 0077, lines 10-14, data file with data for shifting);

a means for determining a phase deviation (Page 4, paragraph 0065, lines 10-13) amount and a deviation direction (Page 4, paragraph 0065, lines 1-4, lateral shift can be performed in the left or right direction) of an object to be stereoscopically displayed based on the description indicating the stereoscopic viewing-use process (Page 5, paragraph 0074);

and a means for carrying out a rendering process of each viewpoint image of the object to be stereoscopically displayed based on the phase deviation amount and the deviation direction (Page 5, paragraph 0077, lines 1-10).

7. Regarding claim 2, Harman discloses the object to be stereoscopically displayed is rendered over an object adjacent thereto, or the object adjacent thereto is rendered over the object to be stereoscopically displayed corresponding to the phase deviation

amount and the deviation direction (Page 4, paragraph 0063 and paragraph 0065, lines 1-3, layers of objects placed over another).

- 8. Regarding claim 3, Harman discloses the object to be stereoscopically displayed, which is to be rendered over, is rendered in such a manner as to be translucent (Page 3, paragraph 0048, variable transparency).
- 9. Regarding claim 4, Harman discloses the rendering-over process is executed when there is in the file a description indicating that the rendering-over process is to be carried out (Page 5, paragraph 0077, a data file containing shift information is used for rendering the stereoscopic image).
- 10. Regarding claim 5, Harman discloses regarding each viewpoint image of the object to be stereoscopically displayed, an object on an adjacent side of the object to be stereoscopically displayed is rendered in such a manner that a location thereof is deviated toward a side of the deviation direction of the object to be stereoscopically displayed (Figures 1-3) only by an amount equal to or larger than the phase deviation amount (Page 4, paragraph 0065).
- 11. Regarding claim 6, Harman discloses a rendering process in which the location of the object on the adjacent side is deviated is executed when there is in the file a description indicating that the rendering process in which the location of the object on the adjacent side is deviated is to be carried out (Page 5, paragraph 0077, lines 10-14, the data file contains data for shifting).

Application/Control Number: 10/558,270

Art Unit: 2628

12. Regarding claim 9, Harman discloses a program (Page 2, paragraph 0033, lines 11-16) enabling a computer to function as: a means for determining a description indicating a stereoscopic viewing-use process out of descriptions in a file (Page 5, paragraph 0077, lines 10-14, data file with data for shifting);

Page 5

a means for determining a phase deviation amount (Page 4, paragraph 0065, lines 10-13) and a deviation direction (Page 4, paragraph 0065, lines 1-4, lateral shift can be performed in the left or right direction) of an object to be stereoscopically displayed based on the description indicating the stereoscopic viewing-use process (Page 5, paragraph 0074);

and a means for carrying out a rendering process of each viewpoint image of the object to be stereoscopically displayed based on the phase deviation amount and the deviation direction (Page 5, paragraph 0077, lines 1-10).

- 13. Regarding claim 10, Harman discloses a computer to function as a means for rendering the object to be stereoscopically displayed over an object adjacent thereto, or rendering the object adjacent thereto over the object to be stereoscopically displayed corresponding to the phase deviation amount and the deviation direction (Page 4, paragraph 0063 and paragraph 0065, lines 1-3, layers of objects placed over another).
- 14. Regarding claim 11, Harman discloses a means for rendering the object to be stereoscopically displayed, which is to be rendered over, in such a manner as to be translucent (Page 3, paragraph 0048, variable transparency).

Art Unit: 2628

15. Regarding claim 12, Harman discloses a means for executing the rendering-over process when there is a description indicating the rendering-over process in a file (Page 5, paragraph 0077, a data file containing shift information is used for rendering the stereoscopic image).

- 16. Regarding claim 13, Harman discloses a means for rendering an object on an adjacent side of the object to be stereoscopically displayed in such a manner that a location thereof is deviated toward a side of the deviating direction of the object to be stereoscopically displayed (Figures 1-3) only by an amount equal to or larger than the phase deviation amount, regarding each viewpoint image of the object to be stereoscopically displayed (Page 4, paragraph 0065).
- 17. Regarding claim 14, Harman discloses a means for executing a rendering process in which the location of the object on the adjacent side is deviated when there is in a file a description indicating that the rendering process in which the location of the object on the adjacent side is deviated is carried out (Page 5, paragraph 0077, lines 10-14, the data file contains data for shifting).

Claim Rejections - 35 USC § 103

18. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Application/Control Number: 10/558,270

Art Unit: 2628

19. Claims 17-20 and 25-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harman (US 2002/0118275 A1) in view of Tomita (US 2002/0008906 A1).

Page 7

20. Regarding claim 17, Harman discloses a stereoscopic image display apparatus for generating a stereoscopic image based on a file (Page 5, paragraph 0077, lines 10-14, data file with data for shifting), comprising:

a means for determining a phase deviation amount (Page 4, paragraph 0065, lines 10-13) and a deviation direction (Page 4, paragraph 0065, lines 1-4, lateral shift can be performed in the left or right direction) of an object to be stereoscopically displayed based on the attribute information (Page 5, paragraph 0074);

and a means for carrying out a rendering process of each viewpoint image to be stereoscopically displayed based on the phase deviation amount and the deviation direction (Page 5, paragraph 0077, lines 1-10).

Harman does not clearly disclose a means for determining whether or not there is attribute information indicating a stereoscopic viewing-use process regarding each character in the file. However, a character is an image object of text.

Tomita discloses rendering stereoscopic images of characters (Page 10, paragraph 0109).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Harman to render character objects

stereoscopically as disclosed by Tomita because images of text can be displayed alongside other objects with a three dimensional effect.

- 21. Regarding claim 18, Harman (Page 2, paragraph 0041, objects are shaded based on depth) lines in view of Tomita discloses an image of a shade of the character to be stereoscopically displayed is rendered.
- 22. Regarding claim 19, Harman (Page 3, paragraph 0041, lines 3-7, further distance has a darker shade while closer distances are lighter) in view of Tomita discloses when the character to be stereoscopically displayed is viewed on a nearer side, a shade is rendered in such a manner that a location thereof is more greatly deviated.
- 23. Regarding claim 20, Harman (Page 2, paragraph 0041, the shading of objects will be the same at the same depth, where further objects would receive a darker shading and closer objects would receive lighter shading) in view of Tomita discloses the shade is rendered by the same color system of the character to be stereoscopically displayed, and by saturation and/or intensity different therefrom.
- 24. Regarding claim 25, Harman discloses a program (Page 2, paragraph 0033, lines 11-16), enabling a computer to function as: a means for determining a phase deviation amount and a deviation direction of a character to be stereoscopically displayed based on the attribute information (Page 5, paragraph 0077, lines 10-14, data file with data for shifting);

and a means for carrying out a rendering process (Page 5, paragraph 0077, lines 1-10) of each viewpoint image of the character to be stereoscopically displayed based

on the phase deviation amount (Page 4, paragraph 0065, lines 10-13) and the deviation direction(Page 4, paragraph 0065, lines 1-4, lateral shift can be performed in the left or right direction).

Page 9

Harman does not clearly disclose a means for determining whether or not there is attribute information indicating a stereoscopic viewing-use process regarding each character in a file. However, a character is an image object of text.

Tomita discloses rendering stereoscopic images of characters (Page 10, paragraph 0109).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Harman to render character objects stereoscopically as disclosed by Tomita because images of text can be displayed alongside other objects with a three dimensional effect.

- 25. Regarding claim 26, Harman (Page 2, paragraph 0041, objects are shaded based on depth) in view of Tomita discloses a means for rendering an image of a shade of the character to be stereoscopically displayed.
- 26. Regarding claim 27, Harman (Page 3, paragraph 0041, lines 3-7, further distance has a darker shade while closer distances are lighter) in view of Tomita discloses a means for rendering a shade in such a manner that a location thereof is greatly deviated, when the character to be stereoscopically displayed is viewed on a nearer side.

- 27. Regarding claim 28, Harman (Page 2, paragraph 0041, the shading of objects will be the same at the same depth, where further objects would receive a darker shading and closer objects would receive lighter shading) in view of Tomita discloses a means for rendering the shade by the same color system of the character to be stereoscopically displayed, and by saturation and/or intensity different therefrom.
- 28. Claims 33-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hisatomi et al. (US 2002/0171857 A1) in view of Yanosy et al. (US 2004/0216147 A1) and further in view of Tomita (US 2002/0008906 A1).
- 29. Regarding claim 33, Hisatomi discloses a text data processing apparatus, comprising: a conversion rule storing means for storing a conversion rule for converting attribute information on a character or a string of characters into another attribute information (Page 4, paragraph 0059, XML rules for converting characters).

Hisatomi does not clearly disclose an attribute searching means for searching from text data the character or the string of characters having the attribute information corresponding to the conversion rule.

Yanosy discloses an attribute searching means for searching from text data the character or the string of characters having the attribute information corresponding to the conversion rule (Page 5, paragraph 0046, lines 1-7, searching policy rules in an XML document).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Hisatomi to search for rules in an XML

document as disclosed by Yanosy because the system can be instructed properly on how to execute certain functions particularly with adjusting attributes of characters.

Hisatomi in view of Yanosy does not disclose an attribute conversion means for converting according to the conversion rule the attribute information on the character or the string of characters searched by the attribute searching means, wherein the conversion rule includes a rule for converting attribute information for producing a three-dimensional stereoscopic display effect on the character or the string of characters into attribute information for producing a certain decoration of a two-dimensional character effect.

Tomita discloses rendering and displaying characters in a stereoscopic display (Page 10, paragraph 0109).

Therefore, it would have been obvious to a person of ordinary skill in the art to modify Hisatomi in view of Yanosy to combine the effects of modifying character attributes with a display of characters stereoscopically because a three dimensional view can be shown giving a higher sense of realism to a user.

30. Regarding claim 34, Hisatomi (Page 4, paragraph 0059, lines 12-15, color (shade)) in view of Yanosy and further in view of Tomita discloses the conversion rule includes a rule for converting the attribute information for producing the three-dimensional stereoscopic display effect into attribute information for producing a two-dimensional character decoration effect approximate to a stereoscopic display such as an italic character, a shaded character, etc.

Art Unit: 2628

31. Regarding claim 35, Hisatomi (Page 4, paragraph 0059, lines 12-15, size) in view of Yanosy and further in view of Tomita discloses a rule for changing a font size of two-dimensional character corresponding to a level of the three-dimensional stereoscopic display effect.

32. Regarding claim 36, Hisatomi discloses a text data processing apparatus, comprising: a conversion rule storing means for storing a conversion rule for converting attribute information on a character or a string of characters into another attribute information (Page 4, paragraph 0059, XML rules for converting characters).

Hisatomi does not clearly disclose an attribute searching means for searching from text data the character or the string of characters having the attribute information corresponding to the conversion rule.

Yanosy discloses an attribute searching means for searching from text data the character or the string of characters having the attribute information corresponding to the conversion rule (Page 5, paragraph 0046, lines 1-7, searching policy rules in an XML document).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Hisatomi to search for rules in an XML document as disclosed by Yanosy because the system can be instructed properly on how to execute certain functions particularly with adjusting attributes of characters.

Hisatomi in view of Yanosy does not clearly disclose an attribute conversion means for converting according to the conversion rule the attribute information on the character or the string of characters searched by the attribute searching means,

wherein the conversion rule includes a rule for converting attribute information for producing a certain decoration of a two-dimensional character effect on the character or the string of characters into attribute information for producing a three-dimensional stereoscopic display effect.

Tomita discloses rendering and displaying characters in a stereoscopic display (Page 10, paragraph 0109).

Therefore, it would have been obvious to a person of ordinary skill in the art to modify Hisatomi in view of Yanosy to combine the effects of modifying character attributes with a display of characters stereoscopically because a three dimensional view can be shown giving a higher sense of realism to a user.

- 33. Regarding claim 37, Hisatomi (Page 4, paragraph 0059, lines 12-15, color (shade)) in view of Yanosy and further in view of Tomita discloses the conversion rule includes a rule for converting attribute information for producing a two-dimensional character decoration effect approximate to a stereoscopic display such as an italic character, a shaded character, etc., into attribute information for producing a three-dimensional stereoscopic display effect.
- 34. Regarding claim 38, Hisatomi (Page 4, paragraph 0059, lines 12-15, size) in view of Yanosy and further in view of Tomita discloses the conversion rule includes a rule for changing a level of the three-dimensional stereoscopic display effect corresponding to a font size of two-dimensional character.

35. Regarding claim 39, Hisatomi discloses a program for providing a computer with a text data conversion function, comprising: a conversion rule table for converting attribute information on a character or a string of characters into another attribute information (Page 4, paragraph 0059, XML rules for converting characters).

Hisatomi does not clearly disclose an attribute searching process for searching from text data the character or the string of characters having the attribute information corresponding to the conversion rule.

Yanosy discloses an attribute searching process for searching from text data the character or the string of characters having the attribute information corresponding to the conversion rule (Page 5, paragraph 0046, lines 1-7, searching policy rules in an XML document).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Hisatomi to search for rules in an XML document as disclosed by Yanosy because the system can be instructed properly on how to execute certain functions particularly with adjusting attributes of characters.

Hisatomi in view of Yanosy does not clearly disclose an attribute conversion process for converting according to the conversion rule the attribute information on the character or the string of characters searched by the attribute searching process, wherein the conversion rule table includes a rule for converting attribute information for producing a three-dimensional stereoscopic display effect on the character or the string of characters into attribute information for producing a certain decoration of a two-dimensional character effect.

Tomita discloses rendering and displaying characters in a stereoscopic display (Page 10, paragraph 0109).

Therefore, it would have been obvious to a person of ordinary skill in the art to modify Hisatomi in view of Yanosy to combine the effects of modifying character attributes with a display of characters stereoscopically because a three dimensional view can be shown giving a higher sense of realism to a user.

- 36. Regarding claim 40, Hisatomi (Page 4, paragraph 0059, lines 12-15, color (shade)) in view of Yanosy and further in view of Tomita discloses the conversion rule table includes a rule for converting the attribute information for producing the three-dimensional stereoscopic display effect into attribute information for producing a two-dimensional character decoration effect approximate to a stereoscopic display such as an italic character, a shaded character, etc.
- 37. Regarding claim 41, Hisatomi (Page 4, paragraph 0059, lines 12-15, size) in view of Yanosy and further in view of Tomita discloses the conversion rule table includes a rule for changing a font size of two-dimensional character corresponding to a level of the three-dimensional stereoscopic display effect.
- 38. Regarding claim 42, Hisatomi discloses a program for providing a computer with a text data conversion function, comprising: a conversion rule table for converting attribute information on the character or the string of characters into another attribute information (Page 4, paragraph 0059, XML rules for converting characters).

Hisatomi does not clearly disclose an attribute searching process for searching

Art Unit: 2628

from text data the character or the string of characters having the attribute information corresponding to the conversion rule.

Yanosy discloses an attribute searching process for searching from text data the character or the string of characters having the attribute information corresponding to the conversion rule (Page 5, paragraph 0046, lines 1-7, searching policy rules in an XML document).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Hisatomi to search for rules in an XML document as disclosed by Yanosy because the system can be instructed properly on how to execute certain functions particularly with adjusting attributes of characters.

Hisatomi in view of Yanosy does not clearly disclose an attribute conversion means for converting according to the conversion rule the attribute information on the character or the string of characters searched by the attribute searching process, wherein the conversion rule table includes a rule for converting attribute information for producing a certain decoration of a two-dimensional character effect on the character or the string of characters into attribute information for producing a three-dimensional stereoscopic display effect.

Tomita discloses rendering and displaying characters in a stereoscopic display (Page 10, paragraph 0109).

Therefore, it would have been obvious to a person of ordinary skill in the art to modify Hisatomi in view of Yanosy to combine the effects of modifying character

Art Unit: 2628

attributes with a display of characters stereoscopically because a three dimensional view can be shown giving a higher sense of realism to a user.

- 39. Regarding claim 43, Hisatomi (Page 4, paragraph 0059, lines 12-15, color (shade)) in view of Yanosy and further in view of Tomita discloses the conversion rule table includes a rule for converting attribute information for producing a two-dimensional character decoration effect approximate to a stereoscopic display such as an italic character, a shaded character, etc., into attribute information for producing a three-dimensional stereoscopic display effect.
- 40. Regarding claim 44, Hisatomi (Page 4, paragraph 0059, lines 12-15, size) in view of Yanosy and further in view of Tomita discloses the conversion rule table includes a rule for changing a level of the three-dimensional stereoscopic display effect corresponding to a font size of two-dimensional character.
- 41. Regarding claim 45, Hisatomi (Page 1, paragraph 0011, memory) in view of Yanosy and further in view of Tomita discloses a storing medium for storing a program according to any one of claims 39 to 44.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

lizuka et al. (US 7,064,754 B2) Stereoscopic-Image Display Apparatus.

Any inquiry concerning this communication or earlier communications from the

Art Unit: 2628

examiner should be directed to PHI HOANG whose telephone number is 571-270-3417. The examiner can normally be reached on Mon-Fri, 8:30am-5:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Xiao Wu can be reached on 571-272-7761. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/Phi Hoang/ Examiner, Art Unit 2628 April 10, 2009

/XIAO M. WU/ Supervisory Patent Examiner, Art Unit 2628